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STATISTICAL COLLECTION FILE (SCF) REPORTING MAINTENANCE GUIDE, (U)
OCT 77 R ROBERTSON, K TROSSEVIN

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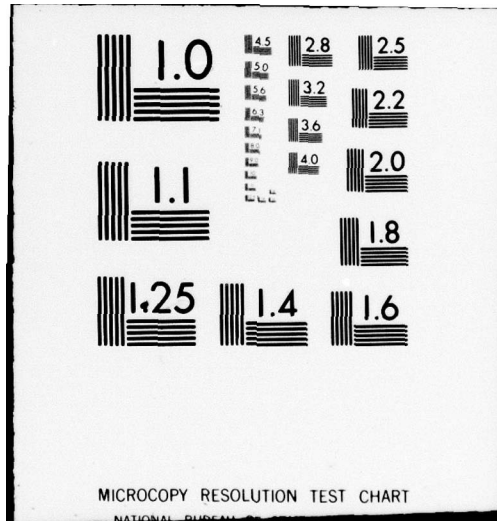
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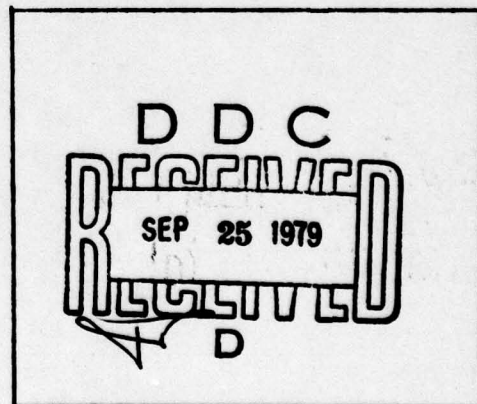
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TASK 626 SUBTASK 3
OCTOBER 31, 1977



WWMCCS

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CCTC TASKING STATEMENT 626
SUBTASK 3

SCF REPORTING MAINTENANCE GUIDE

| | |
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1.0

GENERAL

1.1

Purpose

This document provides the user with those steps necessary to modify any of the World Wide Data Management System (WWDMS) control files which are subordinate to the GSEP User Master Catalog (UMC). Each control file will be presented as a separate unit, and any control file dependencies are indicated. This manual is not intended to present the entire scope of WWDMS.

1.2

Supportive Project References

- A. CCTC Tasking Statement 626, Amendment 1, Statistical Collection File Improvements, Contract Number DCA100-73-C-0055.
- B. CCTC Tasking Statement 610, Amendment 1, Development of WWMCCS System Release WW7.1, Contract Number DCA100-73-C-0055.
- C. SM-447-75, WWMCCS ADP Security Officer (WASSO) Manual, 8 August 1975.
- D. DOD5200.28M, Manual of Techniques and Procedures for Implementing, Deactivating, Testing, and Evaluating Secure Resource-Sharing ADP Systems, January 1973.
- E. SDN N75030, Availability of Meaningful Security Data on the Statistical Collection File.
- F. Paper, W. E. Jacobs, LtJG USN, Proposed Modifications to SCF Records.
- G. HIS Letter, Revision of System Collection File Procedures, 27 January 1976.
- H. Task 409, Subtask 2, SWAPS Evaluation, Job Identification, Contract DCA100-73-C-0055.
- I. Task 409, Subtask 3, SWAPS Evaluation, Equipment Utilization, Contract DCA100-73-C-0055.
- J. Task 626, Subtask 1, Statistical Collection File Improvements Task Study Report, Contract Number DCA100-73-C-0055, 9 July 1976.

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- K. Task 610, Design of WWMCCS System Release WW7.1
Contract Number DCA100-73-C-0055, 15 November 1976.
- L. Honeywell Information Systems Inc., WWMCCS Security User's Guide, Order No. WWMCCS1, Rev. 2, August 1974.
- M. Task 401, WWMCCS Series 6000 Software Release Bulletin 6.2, Contract DCA100-73-C-0055.
- N. Honeywell Information Systems Inc., Summary Edit Program, Order No. DD24A, Rev. 0, January 1975.
- O. Honeywell Information Systems Inc., System Tables, Order No. DD14A, Rev. 0, January 1975.
- P. Honeywell Information Systems Inc., System Console Messages, Order No. DD13, Rev. 0, April 1974.
- Q. Honeywell Information Systems Inc., I-D-S/I User's Guide, Order No. DC53, Rev. 0, April 1974.
- R. Honeywell Information Systems Inc., System Startup, Order No. DD33, Rev. 1, May 1975.
- S. Report R4177511-4-1, Prototype WWMCCS Intercomputer Network Program Specification Network Accounting Program, Contract Number DCA100-75-C-0029, 15 March 1976.
- T. Report R493700013-1-1, Prototype WWMCCS Intercomputer Network Host Software Instrumentation Programming Specification, Contract Number DCA100-75-C-0029, 23 June 1975.
- U. Task 301, Subtask 1, GCOS Static State Hierarchical Structure, Contract Number DCA100-73-C-0055, April 1975.
- V. Honeywell Information Systems Inc., WW6.3.0 GCOS Listings, Analysis Base.
- W. Task 626, Subtask 3, Revision 1, General Summary Edit Program (GSEP) Functional Specifications, Contract Number DCA100-73-C-0055, 18 March 1977.
- X. Task 626, Subtask 3, General Summary Edit Program (GSEP) Design Specification, Contract Number DCA100-73-C-0055, 20 June 1977.

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2.0 WWDMS CONTROL FILES SUMMARY

2.1 General

WWDMS operates in both the batch and time sharing environments. Procedure execution is performed in the batch environment, with the remaining functions performed via the time sharing environment. Both environments use special WWDMS control files in addition to any system files.

In many instances the control files' content is dependent upon other control files and their content. The following control file descriptions will indicate any such dependencies and their hierarchy. For a thorough description of all control files, their content, function(s) and dependencies, please reference the World Wide Data Management System Administrator's Guide - DB98.

2.2 WWDMS Control File Translations

The initial control files contain source statements in ASCII. These source files must be converted to their object formats using the appropriate translator. The following translation flow (Figure 2-1) illustrates, from left to right, the sequence in which control files must be converted.

The source Directory (DIRXLT) and source Data Definition Language (DDLXLT) must be translated into their respective object equivalents prior to the Application Definition File translation. However, the DIRXLT and DDLXLT translations may be performed in any user sequence. The object ADF is the only illustrated control file which the end user has a need to reference.

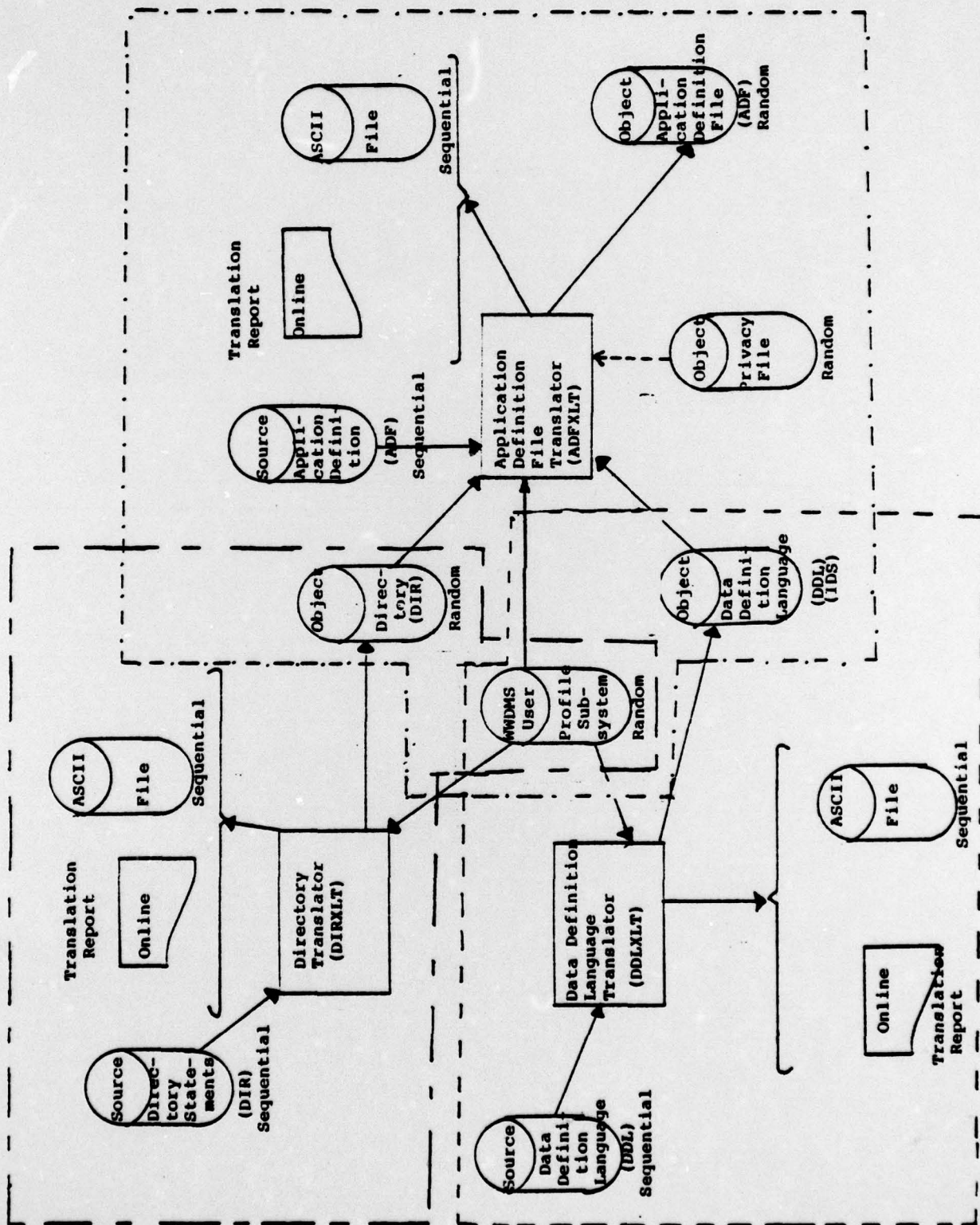


Figure 2-1. Translation Flow

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2.3

WWDMS User Profile Subsystem

The WWDMS User Profile Subsystem (UPS) file contains permission bits which allow/disallow USERIDs to perform specific WWDMS-related functions. Prior to the execution of any user-requested functions, all WWDMS-related functions query this file, which is maintained via WWDMS' time sharing subsystem WWUP.

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3.0

WWDMS CONTROL FILES MAINTENANCE

The necessary control files are located under the subcatalogs of SOURCE and OBJECT, which is subordinate to the GSEP UMC. The qualified catalog/file strings to obtain the previously illustrated files (Figure 2-1) are as follows:

| | |
|-----------------|---|
| GSEP/SOURCE/DIR | Source Directory |
| GSEP/SOURCE/DDL | Source Data Definition Language |
| GSEP/SOURCE/ADF | Source Application Definition File |
| DATAMGT/UPSFILE | The WWDMS User Profile Subsystem File |
| GSEP/OBJECT/DIR | Object Equivalent of Source Directory |
| GSEP/OBJECT/DDL | Object Equivalent of Source Data Definition Language |
| GSEP/OBJECT/ADF | Object Equivalent of Source Application Definition File |

If the user desires to use the optional Privacy File, the source Directory must be modified and retranslated.

3.1

Directory Maintenance

The supplied source Directory's content is as follows:

DATA-BASE-REFERENCE IS GSEP-DATA-BASE
SEQUENTIAL-DATA-BASE IS GSEP/DATABASE
DEFINITION-SOURCE-FILE IS GSEP/SOURCE/DDL
DEFINITION-OBJECT-FILE IS GSEP/OBJECT/DDL
USER-SUBROUTINE-LIBRARY IS GSEP/OBJECT/USL

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END GSEP-DATA-BASE

The specified Data Base Reference is used in the Directory, Data Definition Language and Application Definition File. New source entries are inserted between the USER-SUBROUTINE-LIBRARY and END entries. Any modification made to this file requires a DIR translation (DIRXLT) and an ADF translation (ADFXLT).

3.2 Data Definition Language Maintenance

The source Data Definition Language is very extensive since it must describe all attributes of each record (total data base description is called the schema). Each new record entry is required to have certain descriptions made; those records that currently exist have some coding-established conventions. The source statements must follow COBOL conventions. Card column 8 is reserved for MD, 01 and 98 entries, while all subsequent entries must start to the right of card column 8. All semi-colons (;) as seen in the following illustrations are mandatory. Following is a description of those WWDMS-required entries as well as those imposed by GSEP.

The first two (optionally three) statements describe the data base reference name, type of file organization and, optionally, the use of NVU processing. The first three supplied statements are as follows:

```
CC8
  MD GSEP-DATA-BASE;
    FILE IS SEQUENTIAL;
    USE NULL PROCESSING.
```

Initially, each record must contain three identifying lines which specify record name, what unique value is used to identify this record type and its main access path. Access path describes whether a SCAN of the file is to be done or if a record is dependent/subordinate to a "master" record.

The first example shows a "master" record, which is found by SCANNing the sequential file. The second example illustrates a record which is subordinate ("detail") to a "master" record.

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CC8

```
01 REC001;  
   TYPE IS "001 " IN REC-ID;  
   RETRIEVAL VIA SCAN.
```

CC8

```
01 REC507-CONTD;  
   TYPE IS "507C" IN REC-ID;  
   RETRIEVAL VIA REC507-REC507C.
```

Once the initial three record definition statements are coded, record description may begin. As a coding convention there are one or more information/comment lines bracketed by asterisks prior to the first record description entry. These comment/information lines are intended to help describe the function of this record type. See the following illustration.

CC1

```
*****  
* RECORD TYPE 507C IS IDENTICAL TO  
* NEW RECORD TYPE 507 EXCEPT THAT  
* 507C HAS A TSS COUNT AS THE FIRST  
* WORD FOLLOWED BY 5 "WORDS" FOR  
* EACH TSS SUBSYSTEM.  
*****
```

The first description of all record types are used to describe the standard record header which must precede all user data fields. The following illustration depicts those fields and their attributes which must reside within the standard record header.

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CC1

***** THE STANDARD RECORD HEADER FOLLOWS *****

```
02 REC-SCAN-FIELD.
  04 SERVER-HOST-ID    PIC X(12).
  04 UID.
    06 UNIQUE-ID      PIC 9(06).
  04 REC-ID.
    06 REC-TYPE        PIC X(03).
    06 CONTD-IND       PIC X(01).
02 PROGRAM-NO.
  04 PROG-NO          PIC 9(02).
02 CURRENT-DATE       PIC X(06).
02 REC-CREATE-TIME    PIC 9(06), USAGE IS COMP-1.
02 USER-HOST-ID      PIC X(12).
02 USERID             PIC X(12).
02 JOB-SNUMB.
  04 SNUMB            PIC X(05).
  04 FILLER           PIC X(01).
```

* JOB-SNUMB IS SUBDIVIDED INTO TWO FIELDS
* SNUMB CONTAINS THE STANDARD 5 CHARACTER SNUMB,
* WHILE THE 1 CHARACTER FILLER WILL CONTAIN
* USEFUL DATA ON CERTAIN RECORD TYPES.

```
02 ACT-NO.
  04 ACTIVITY-NO      PIC 9(02).
02 REC-SIZE.
  04 RECORD-SIZE     PIC 9(03).
02 DN-NO.
  04 DATANET-NO      PIC 9(01).
02 TERM-TYPE.
  04 TERMINAL-TYPE   PIC X(06).
02 TERM-ID.
  04 TERMINAL-ID     PIC X(02).
```

* CONTINUATION INDICATOR (CONTD-IND) CONTAINS EITHER
* A SPACE FOR
* A RECORD WHICH HAS NO SUBSEQUENT CONTINUATION RECORD
* OR THE ORIGINAL RECORD (MASTER) OF A RECORD "SET",
* OR, "C" FOR A CONTINUATION RECORD (DETAIL RECORD).

***** THIS ENDS THE STANDARD HEADER DESCRIPTION. *****

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The last header entry (TERMINAL-ID) occupies character positions 1 through 80 of the record. If a COMP-1 field follows (requiring word alignment), a four-character FILLER is automatically inserted prior to the COMP-1 field encountered. To make use of these four characters, data field(s) totaling four characters must be described.

Upon completing a record description, at least one 98 level entry must appear. If the described record has no subordinate (detail record), only one 98 level record is required (as shown in the first example). However, a record description which is a master, must have one additional 98 level entry for each described subordinate (detail) record (shown in the second example). A detail record will have only one 98 level entry which describes its relationship to its master (shown in the third example).

CC8

98 SYSTEM DETAIL;
DUPLICATES NOT ALLOWED;
SCAN ON REC-SCAN-FIELD.

CC8

98 SYSTEM DETAIL;
DUPLICATES NOT ALLOWED;
SCAN ON REC-SCAN-FIELD.
98 REC507-REC507C MASTER;
ORDER IS SORTED.

CC8

98 REC507-REC507C DETAIL;
DUPLICATES NOT ALLOWED.

After the last record description is made, a DDL translation (DDLXLT) and ADF translation (ADFXLT) must be performed. If any entries include references to a Privacy file, the DIR translation (DIRXLT) must also be performed (prior to the mandatory ADFXLT). Inclusion of any CHECK, ENCODING, DECODING clauses requires that the declared function(s) and/or subroutine(s) be on the User Subroutine Library (GSEP/OBJECT/USL) prior to access of those data fields which have either of these clauses.

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3.3

Application Definition File Maintenance

The ADF object file is the most important control file to the end user, since it is the file named on the procedure INVOKE statement. Each inserted record type must be declared in an ADF entry statement before it can be obtained via a WWDMS procedure.

The first entry names the data base reference and the catalog/file string which is used at translation time (ADFXLT) as a pointer to the object directory. The remaining statements are either ENTRY statements or comment lines.

Each named ENTRY is associated with a single record type. If a user desires to retrieve multiple record types, the RETRIEVE statement must explicitly mention all they desire to process. All entry names match their respective record names. See the following example.

```
ENTRY REC001 IS RECORD REC001
```

Once all entries are defined, a translation (ADFXLT) must occur. Upon successful completion, the user may now obtain this file via the INVOKE statement.